IN THE CLAIMS

This listing of the claim will replace all prior versions and listings of claim in the present application.

Listing of Claims

1. (previously presented) An address translator to be coupled to a first network conforming to a first addressing system, and to be coupled to a second network conforming to a second addressing system, said address translator comprising:

an address translating unit which translates, in a Layer 3 region of communication data, a Layer 3 address of the first addressing system into a Layer 3 address of the second addressing system, or translates, in a Layer 3 region of communication data, a Layer 3 address of the second addressing system into a Layer 3 address of the first addressing system; and

a detecting unit which detects that the communication data conforms to a particular protocol based on a port number contained in a header corresponding to a Layer 4 region of the communication data; and

a creating unit which creates translation information including a correspondence relationship between the Layer 3 address of the first addressing system and the Layer 3 address of the second addressing system for translating a Layer 3 address contained in a region of the communication data higher than the Layer 3 region, when the detecting unit detects that the communication data conforms to the particular protocol.

2. (previously presented) The address translator according to claim 1, further comprising:

a communicating means for communicating with a server device,

wherein said address translator sends said translation information and the region of the communication data higher than the Layer 3 region to said server device, and receives information including said Layer 3 address described in the region of the communication data higher than the Layer 3 region which has been translated by said server device.

3. (previously presented) The address translator according to claim 1, further comprising:

a processing part for translating said Layer 3 address described in the region of the communication data higher than the Layer 3 region.

4. (previously presented) A message processing method, comprising:

performing first translation processing, in a Layer 3 region of a message, to translate a Layer 3 address from information conforming to a first addressing system to information conforming to a second addressing system;

performing detection processing, to detect that the message conforms to a particular protocol based on a port number contained in a header corresponding to a Layer 4 region of the message; and

when the message, which conforms to the particular protocol, is detected by the step of performing detection processing, creating translation information including a correspondence relationship between the Layer 3 address of the first addressing system and the Layer 3 address of the second

addressing system for translating a Layer 3 address contained in a region of the communication data higher than the Layer 3 region.

5. (previously presented) The message processing method according to claim 4, further comprising:

using a first server and a second server;

performing said first translation processing in said first server;

transferring the translation information and the region of the message higher than the Layer 3 region from said first server to said second server;

extracting, by said second server, a parameter which requires the translation from said region of the message higher than the Layer 3 region;

performing second translation processing which translates said Layer 3 address described in the region of the message higher than the Layer 3 region on said extracted parameter in said second server; and

transferring the information in said region of the message higher than the Layer 3 region which has undergone said second translation processing from said second server to said first server.

6. (previously presented) The message processing method according to claim 5, wherein said second server has a table indicative of parameters in the region of the message higher than the Layer 3 region which require the translation, and extracts the parameter which requires the translation from said region of the message higher than the Layer 3 region based on said table.

7. (previously presented) The message processing method according to claim 5, wherein said first server transfers the parameter which requires the translation together, with a tag added thereto, in said region of the message higher than the Layer 3 region to said second server, and

wherein said second server extracts the parameter which requires the translation from said region of the message higher than the Layer 3 region based on said tag.

8. (previously presented) The message processing method according to claim 4, wherein said region of the message higher than the Layer 3 region is a payload including a Session Initiation Protocol (SIP) message.

Claims 9-19 (canceled).

20. (previously presented) The address translator according to claim 2, wherein said region of the communication data higher than the Layer 3 region comprises parameter which requires translation of the region of the communication data higher than the Layer 3 region.

21. (previously presented) The address translator according to claim 20, wherein said address translator sends the region of the communication data higher than the Layer 3 region with a tag added to said parameter by said address translator,

wherein said server device extracts the parameter which requires the translation from the region of the communication data higher than the Layer 3 region based on said tag which requires the translation of the region of the communication data higher than the Layer 3 region.

22. (previously presented) The address translator according to claim 1, wherein in case of that the first addressing system is Internet Protocol Version 4 (IPv4), the second addressing system is Internet Protocol Version 6 (IPv6), and

wherein in case of that the first addressing system is IPv6 and the second addressing system is IPv4.

23. (previously presented) The message processing method according to claim 4, wherein in case of that the first addressing system is Internet Protocol Version 4 (IPv4), the second addressing system is Internet Protocol Version 6 (IPv6), and

wherein in case of that the first addressing system is IPv6, the second addressing system is IPv4.

Claim 24 (canceled).

25. (currently amended) An address translating system comprising:

an address translator; and

a server device, which is connected to a first network conforming to a first address system and a second network conforming to a second addressing system,

wherein the address translator comprises:

address translating unit which translates, in a Layer 3 region of communication data, a Layer 3 address of the first addressing system into a Layer 3 address of the second addressing system, or translating, in a Layer 3 region of communication data, a Layer 3 address of the second addressing system into a Layer 3 address of the first addressing system; and

detecting unit which detects that the communication data conforms to a particular protocol based on a port number contained in a header corresponding to a Layer 4 region of the communication data; and

creating unit which creates translation information including a correspondence relationship between the Layer 3 address of the first addressing system and the Layer 3 address of the second addressing system for translating a Layer 3 address contained in a region of the communication data higher than the Layer 3 ~~resion~~region, when the detecting means detects that the communication data conforms to the particular protocol.

26. (previously presented) The address translating system according to claim 25, wherein the address translator further comprises:

communicating means for communicating with the server device,

wherein the address translator sends the translation information and the region of the communication data higher than the Layer 3 region to the server device, and receives information including the Layer 3 address

described in the region of the communication data higher than the Layer 3 region which has been translated by the server device.

27. (previously presented) The address translating system according to claim 26, wherein the server device receives the translation information and the region of the communication data higher than the Layer 3 region from the address translator, and translates the Layer 3 address conforming to the first addressing system described in the region of the communication data higher than the Layer 3 region to a Layer 3 address conforming to the second addressing system based on the translation information, and sends information including the Layer 3 address described in the region of the communication data higher than the Layer 3 region which has been translated by the server device.

28. (previously presented) The address translating system according to claim 25, wherein the region of the communication data higher than the Layer 3 region, which is sent from the address translator to the server device, comprises:

parameter which requires translation of the region of the communication data higher than the Layer 3 region of the communication data.

29. (previously presented) The address translating system according to claim 28, wherein the address translator sends the region of the communication data higher than the Layer 3 region with a tag added to the

parameter which requires the translation of the region of the communication data higher than the Layer 3 region,

wherein the server device extracts the parameter which requires the translation from the region of the communication data higher than the Layer 3 region based on the tag.

30. (previously presented) The address translating system according to claim 25, wherein in the case of that the first addressing system is Internet Protocol Version 4 (IPv40, the second addressing system is Internet Protocol Version 6 (IPv6), and

wherein in the case of that the first addressing system is IPv6, the second addressing system is IPv4.

31. (previously presented) The address translating system according to claim 25, wherein the particular protocol is a Session Initiation Protocol (SIP).

32. (previously presented) The address translator according to claim 1, wherein the port number is described in a Transport layer as Layer 4.

33. (previously presented) The address translator according to claim 1, wherein the port number is described by Transmission Control Protocol (TCP) as Layer 4.

34. (previously presented) The address translator according to claim 1, wherein the port number is described by User Datagram Protocol (UDP) as Layer 4.

35. (previously presented) The address translator according to claim 1, wherein the port number is an identifier indicating that the region of the communication data higher than the Layer 3 region is described by Session Initiation Protocol (SIP).

36. (previously presented) The address translator according to claim 1, wherein at least a portion of the region of the communication data higher than the Layer 3 region is described by Session Initiation Protocol (SIP) and includes the Layer 3 address.

37. (previously presented) The message processing method according to claim 4, wherein the port number is described in a Transport layer as Layer 4.

38. (previously presented) The message processing method according to claim 4, wherein the port number is described by Transmission Control Protocol (TCP) as Layer 4.

39. (previously presented) The message processing method according to claim 4, wherein the port number is described by User Datagram Protocol (UDP) as Layer 4.

40. (previously presented) The message processing method according to claim 4, wherein the port number is an identifier indicating that the region of the communication data higher than the Layer 3 region is described by Session Initiation Protocol (SIP).

41. (previously presented) The message processing method according to claim 4, wherein at least a portion of the region of the communication data higher than the Layer 3 region is described by Session Initiation Protocol (SIP) and includes the Layer 3 address.

42. (previously presented) The address translating system according to claim 25, wherein the port number is described in a Transport layer as Layer 4.

43. (previously presented) The address translating system according to claim 25, wherein the port number is described by Transmission Control Protocol (TCP) as Layer 4.

44. (previously presented) The address translating system according to claim 25, wherein the port number is described by User Datagram Protocol (UDP) as Layer 4.

45. (previously presented) The address translating system according to claim 25, wherein the port number is an identifier indicating that

the region of the communication data higher than the Layer 3 region is described by Session Initiation Protocol (SIP).

46. (previously presented) The address translating system according to claim 25 wherein at least a portion of the region of the communication data higher than the Layer 3 region is described by Session Initiation Protocol (SIP) and includes the Layer 3 address.